

Mankato Downtown Traffic Study



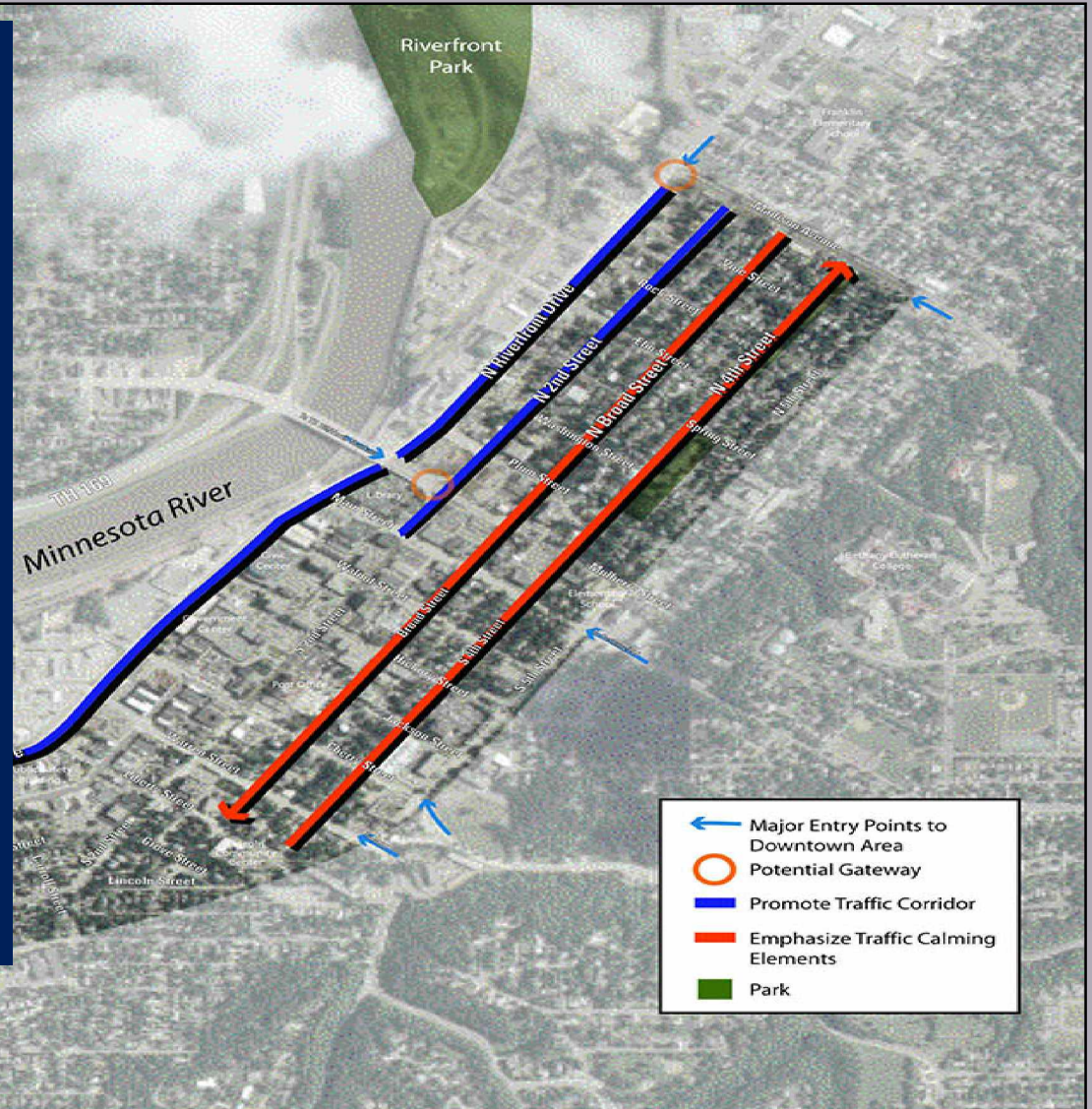
Project Area



Project Intent

Enhance livability of 4th Street & Broad Street by reducing traffic speeds and diverting traffic to 2nd Street & Riverfront Drive

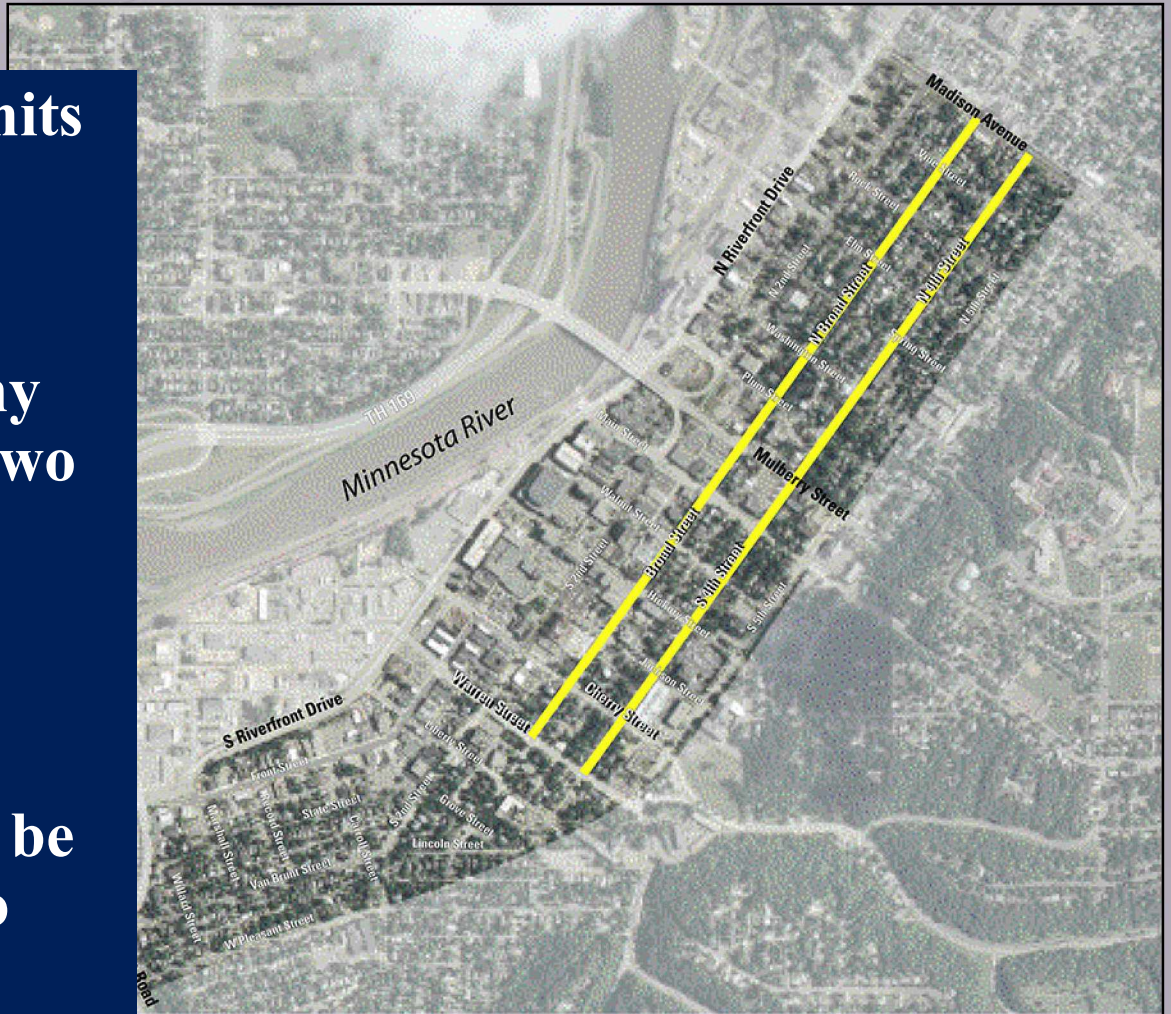
Increase economic vitality of Riverfront Drive & 2nd Street



Traffic Data

Existing residential units along Broad and 4th Streets account for roughly 25 percent of vehicles per day on any given segment of the two roadways between Madison Avenue and Warren Street.

These vehicles cannot be removed from the two roadways.



Traffic Data cont.

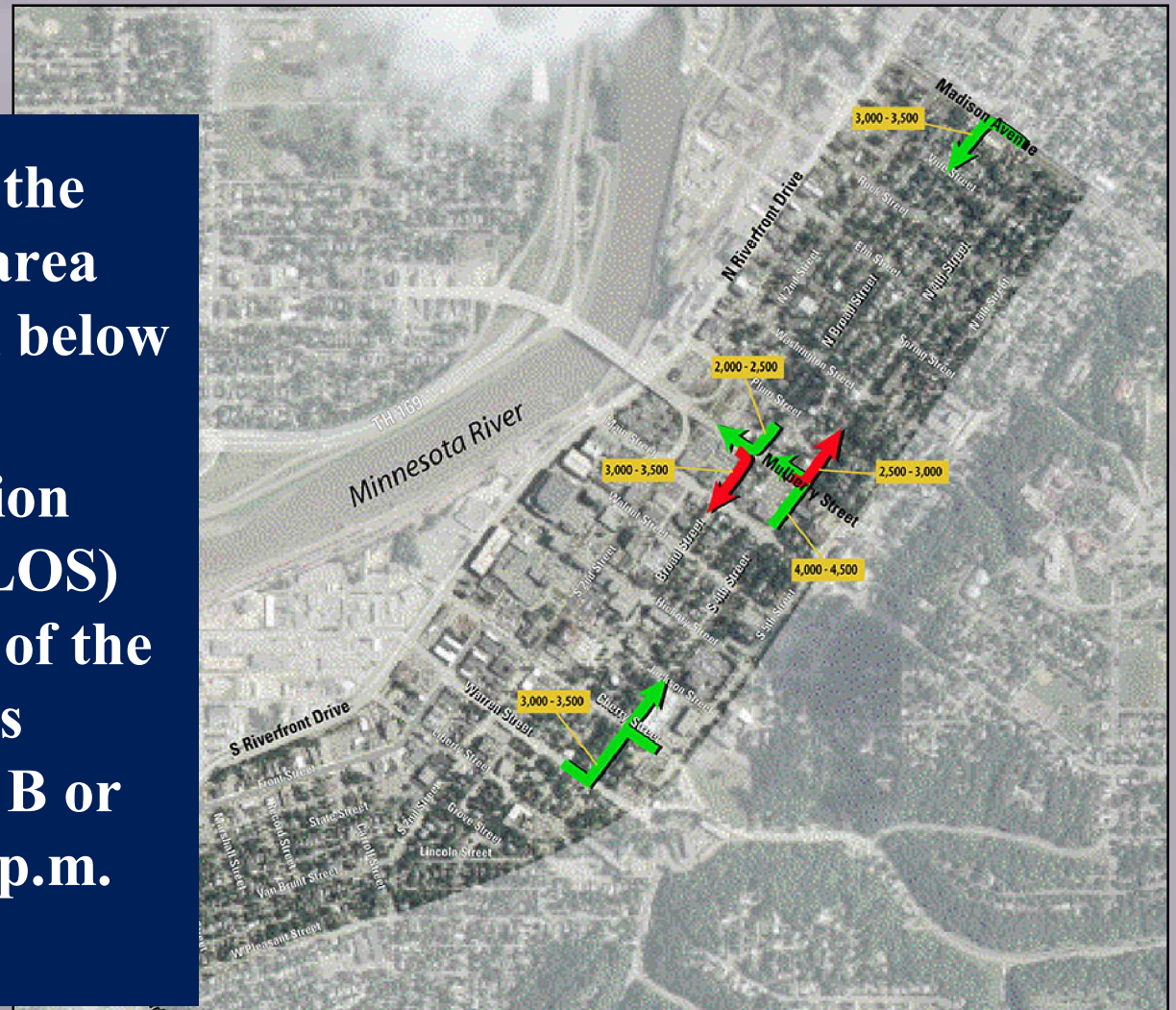
**There are few trips that
travel full length between
Madison Avenue and
Warren/Cherry**

- **On Broad and 4th Street, most trips are between:**
 - **Madison Avenue and Mulberry Street**
 - **Mulberry Street and Warren/Cherry**



Traffic Data cont.

- **Roadways within the downtown study area are currently well below capacity.**
- **Existing intersection levels of service (LOS) are good, with all of the study intersections operating at LOS B or better during the p.m. peak hour.**



Traffic Data cont.

- 85th percentile speeds are 10 to 20 percent higher than the posted speeds on selected segments of:
 - Riverfront Drive
 - 2nd Street
 - 4th Street
 - Broad Street
 - 5th Street



Traffic Data cont.

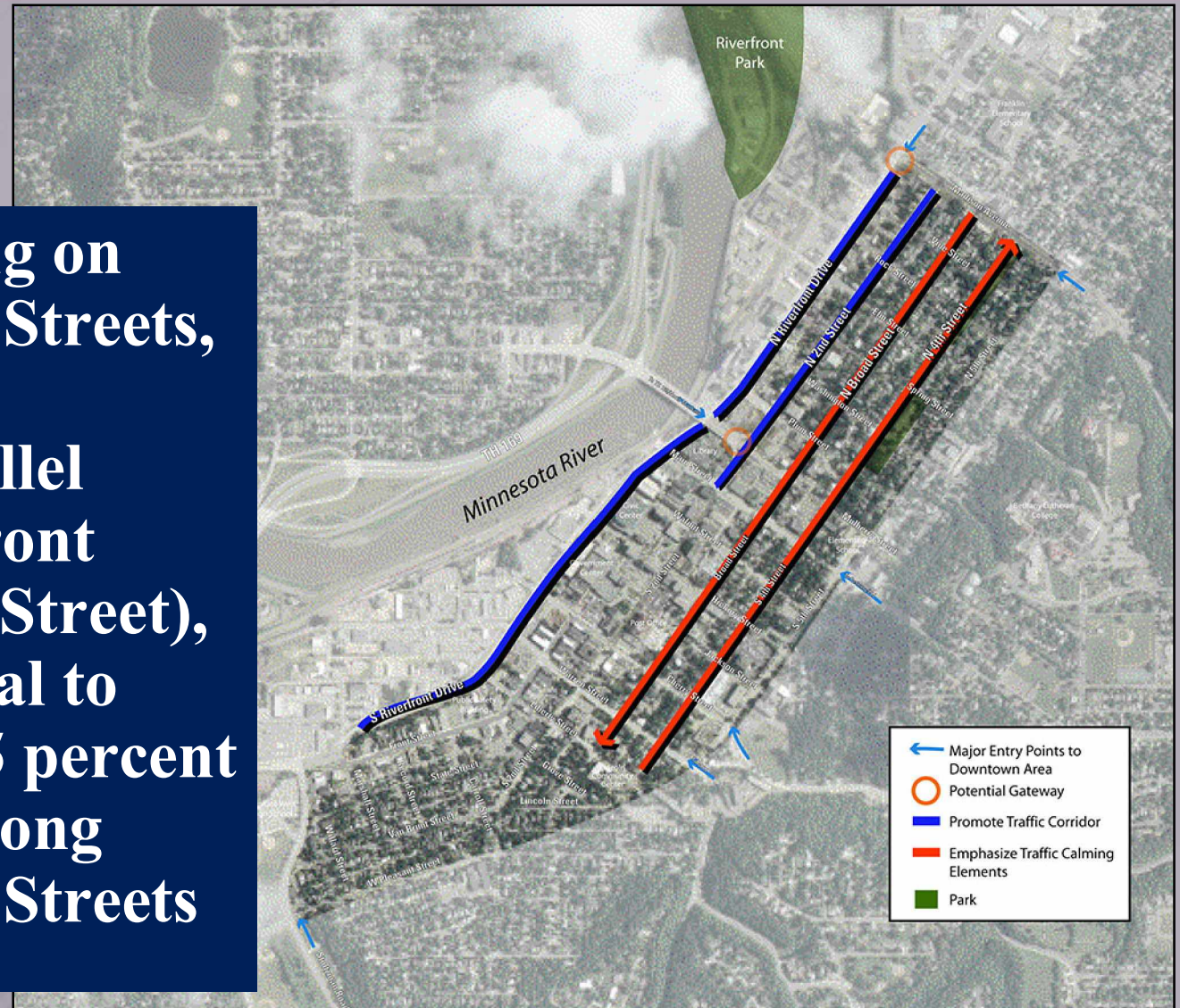
There is little difference between the off-peak (1:30 p.m. to 3:30 p.m.) and the peak (4:00 p.m. to 6:00 p.m.) travel times along

- Riverfront Drive
- 4th Street
- Broad Street
- 5th Street



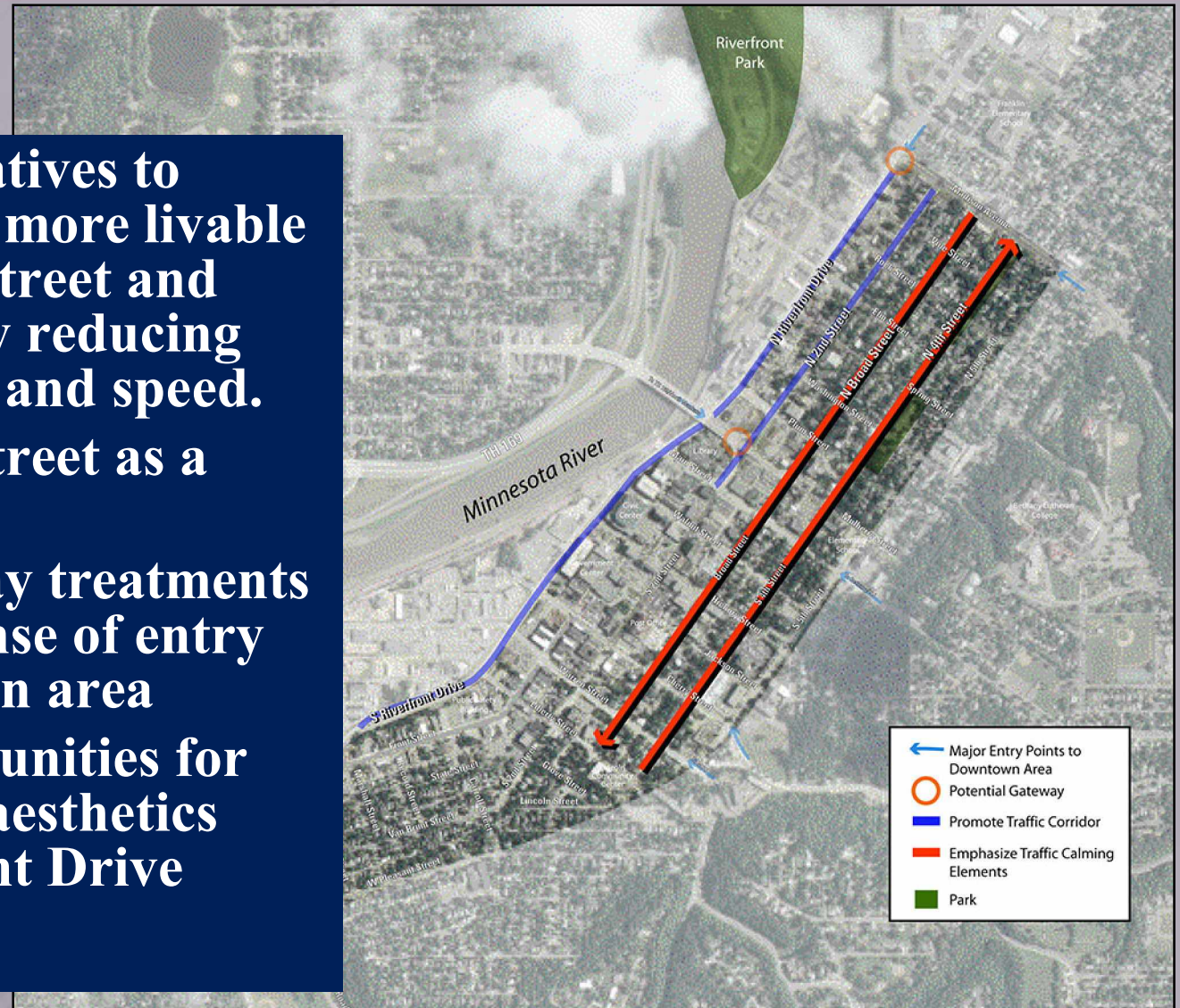
Traffic Analysis

**Traffic Calming on
Broad and 4th Streets,
combined with
improved parallel
routes (Riverfront
Drive and 2nd Street),
has the potential to
reduce 20 to 25 percent
of the traffic along
Broad and 4th Streets**

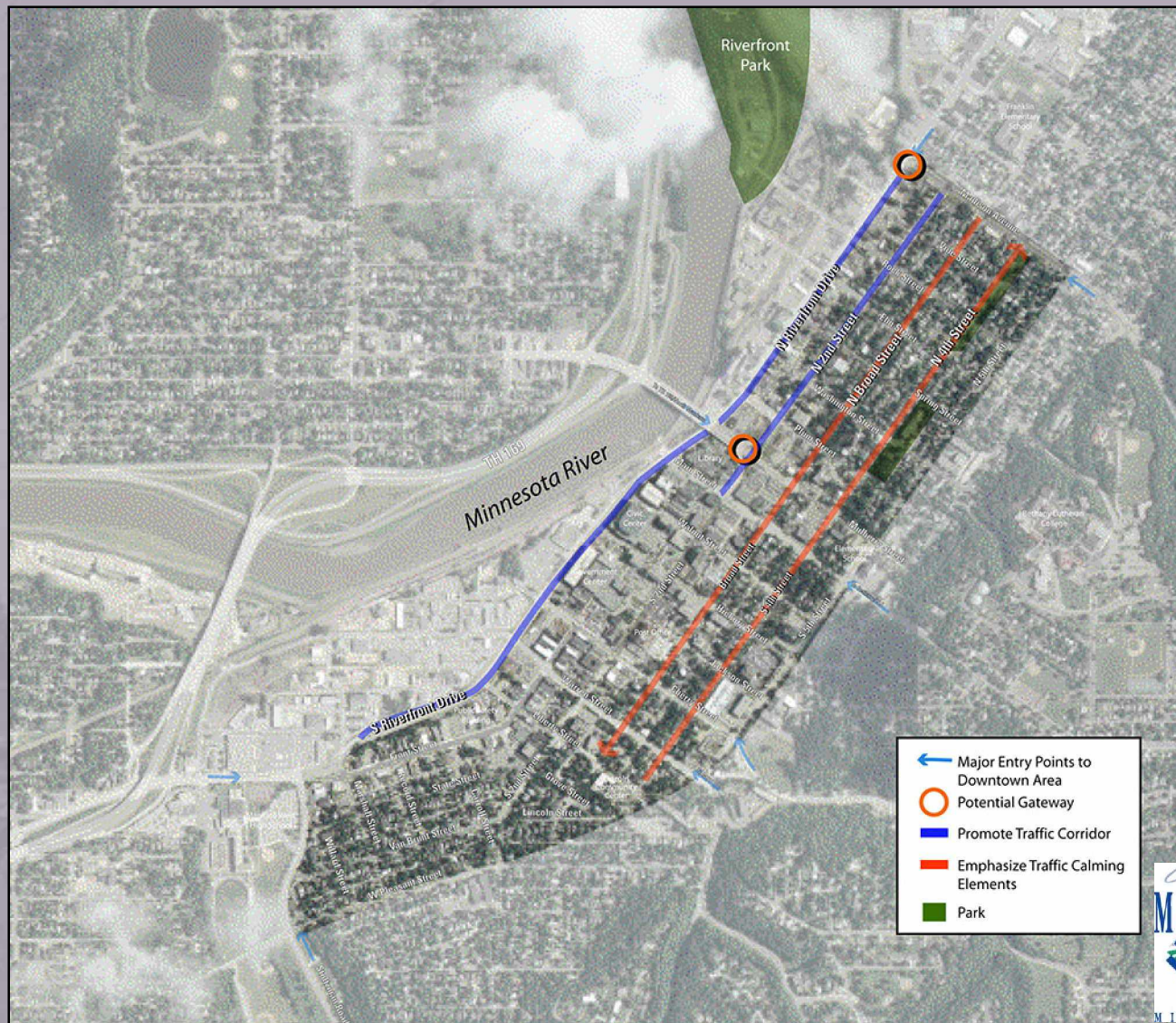


Project Goals

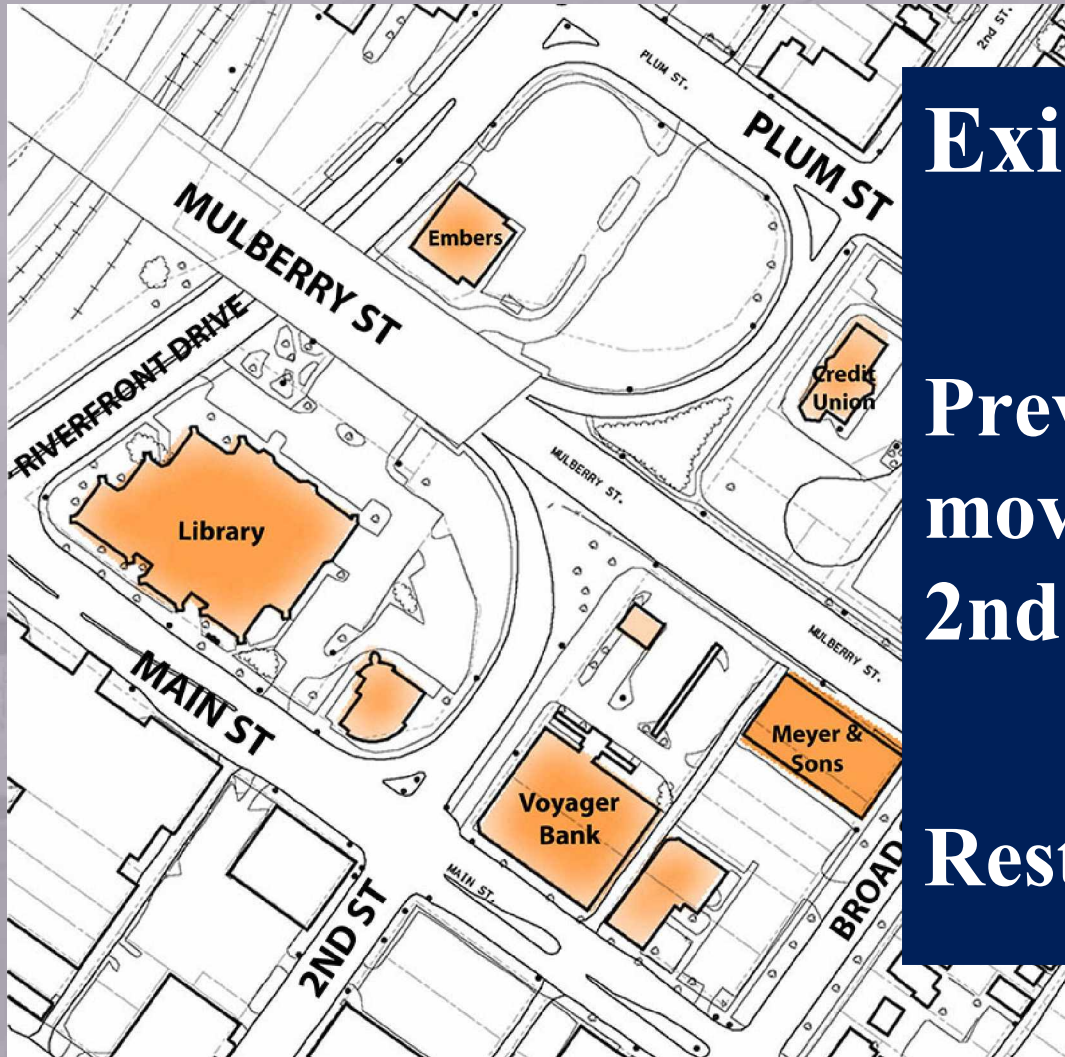
- **Identify alternatives to increase/create more livable streets on 4th Street and Broad Street by reducing traffic volumes and speed.**
- **Promote 2nd Street as a traffic corridor**
- **Identify gateway treatments to provide a sense of entry to the downtown area**
- **Identify opportunities for improving the aesthetics along Riverfront Drive**



Primary Intersections



Mulberry Avenue & 2nd Street

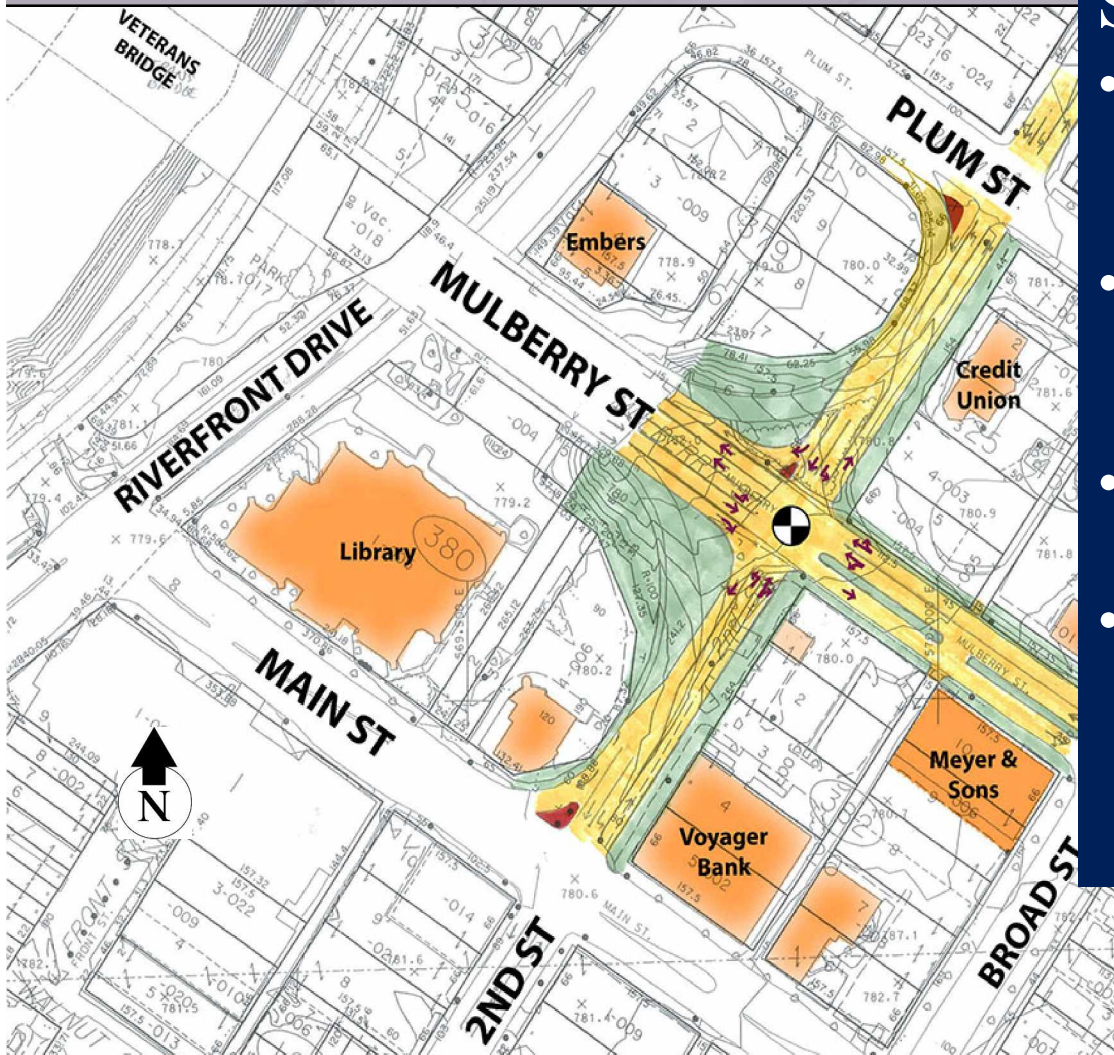


Existing Conditions

**Prevents through
movements on
2nd Street**

Restricts access

Mulberry Avenue & 2nd Street



Signalization

- Opportunity for gateway in NW & SW quadrants
- Greater opportunity to discourage certain traffic movements
- Balances downtown traffic
- Reestablish the grid system and reconnects the downtown

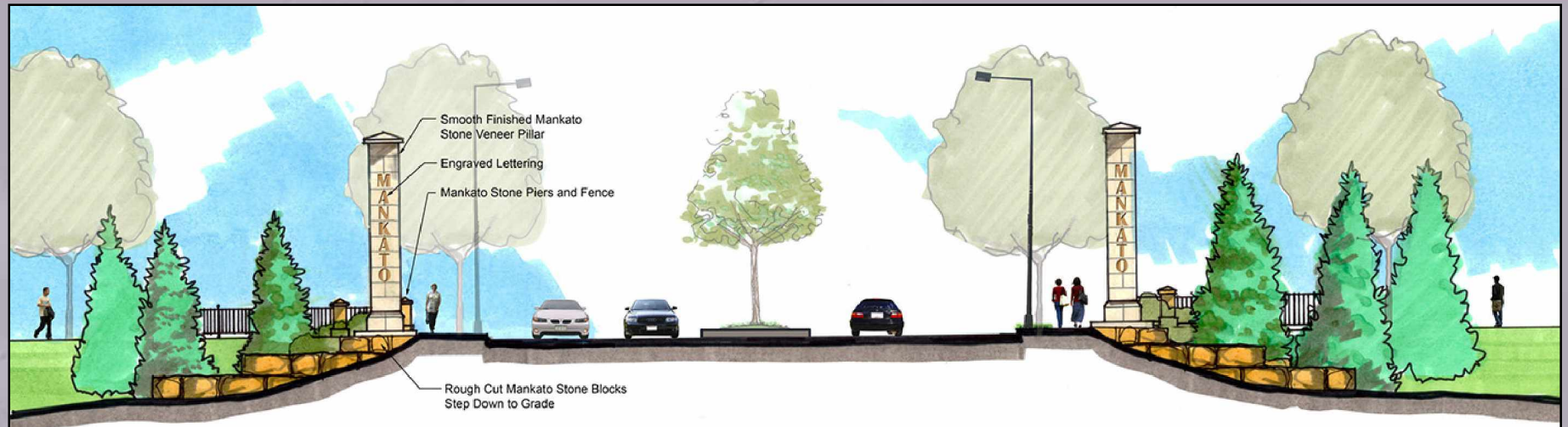
Mulberry Avenue & 2nd Street



View from Bridge

Community Gateway

Mulberry Avenue & 2nd Street

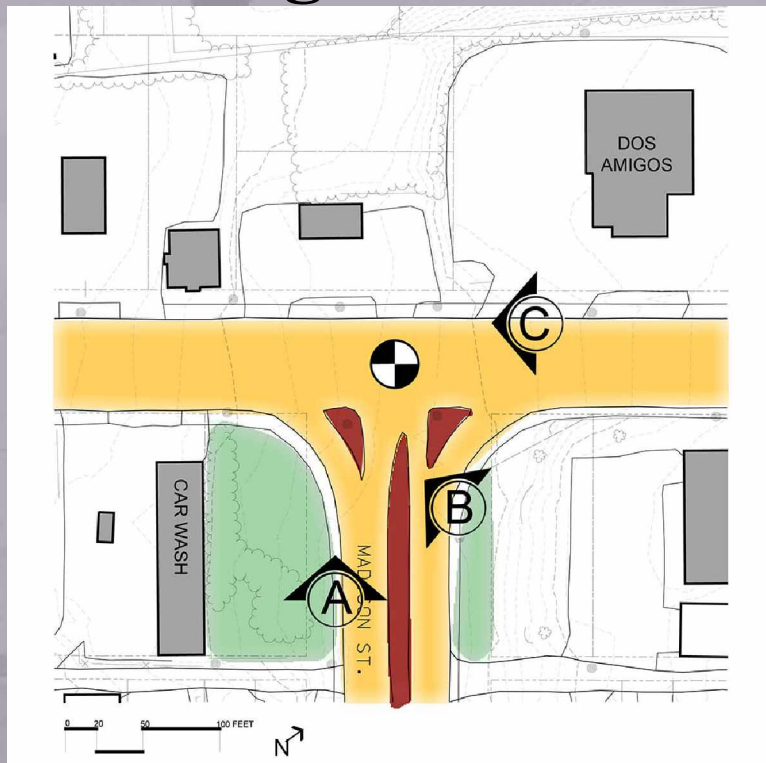


CONCEPT 1
ELEVATION LOOKING SOUTHEAST



Madison Avenue & Riverfront Drive

Existing Conditions



SRF
CONSULTING GROUP, INC.



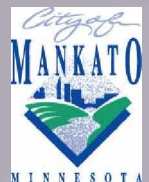
A - View looking northwest



B - View looking west across Madison Avenue



C - View looking south



Madison Avenue & Riverfront Drive

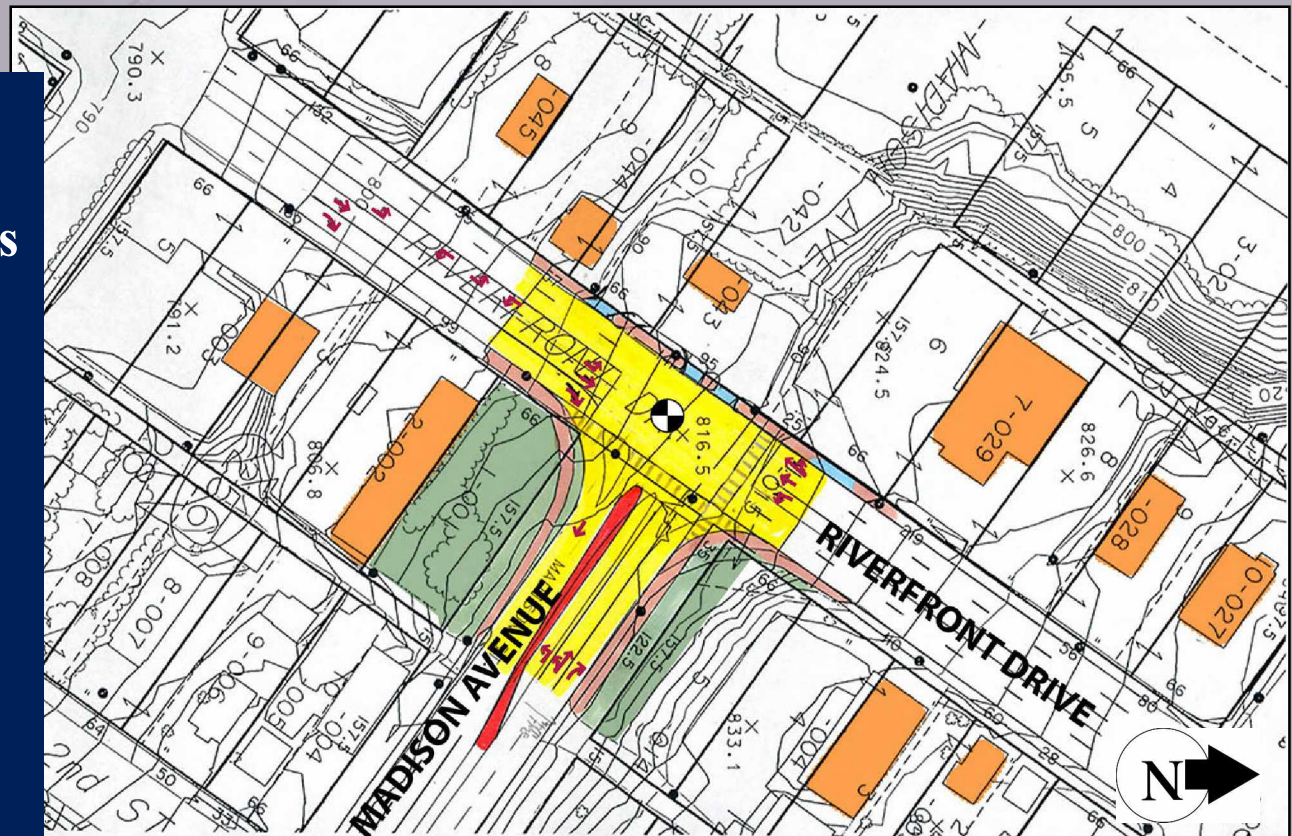
Geometric & Signal Improvements

Pros:

- More efficient traffic operations
- Revisions occur within existing curb lines
- Pedestrian friendly

Cons:

- Limited opportunity for gateway options

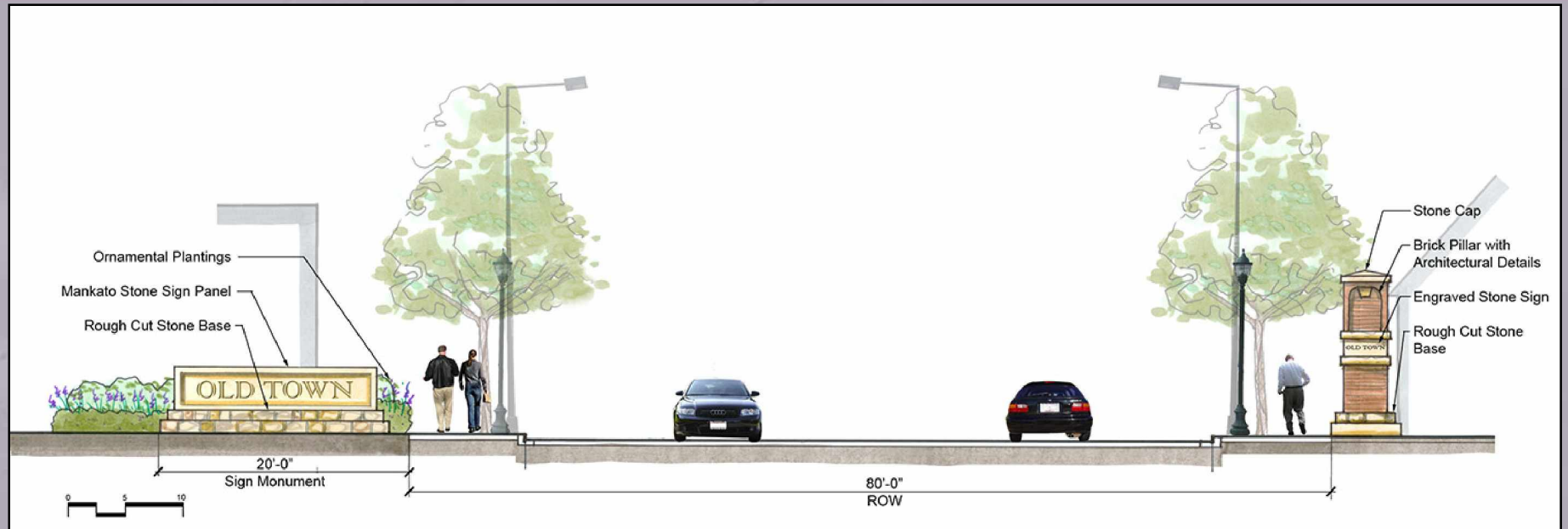


Madison Avenue

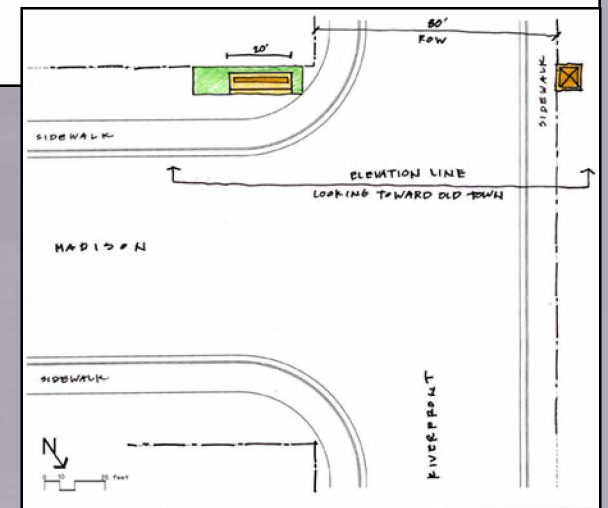
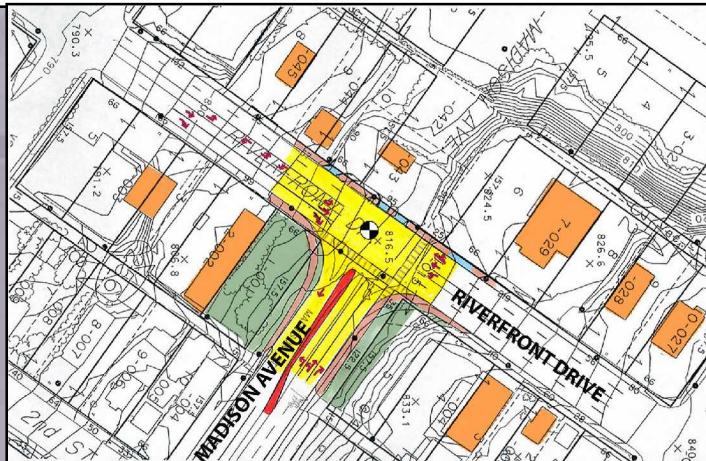


Old Town Gateway

Madison Avenue & Riverfront Drive



Concept 2 - Mankato Stone Monument with Brick Pillar
(Elevation Looking Towards Old Town)



Riverfront Drive - *Existing Conditions*

- Unfriendly pedestrian atmosphere
- Meandering centerline leads to driver confusion and lack of uniformity
- Intermittent parking
- Wide variety of adjacent land uses



Old Town District - Vision

(Riverfront Drive)

- Strengthen specialty retail and entertainment land uses
- Promote pedestrian scaled street
- Increase on-street parking
- Increase traffic efficiency

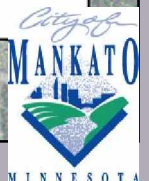


Old Town District - Objectives

(Riverfront Drive)

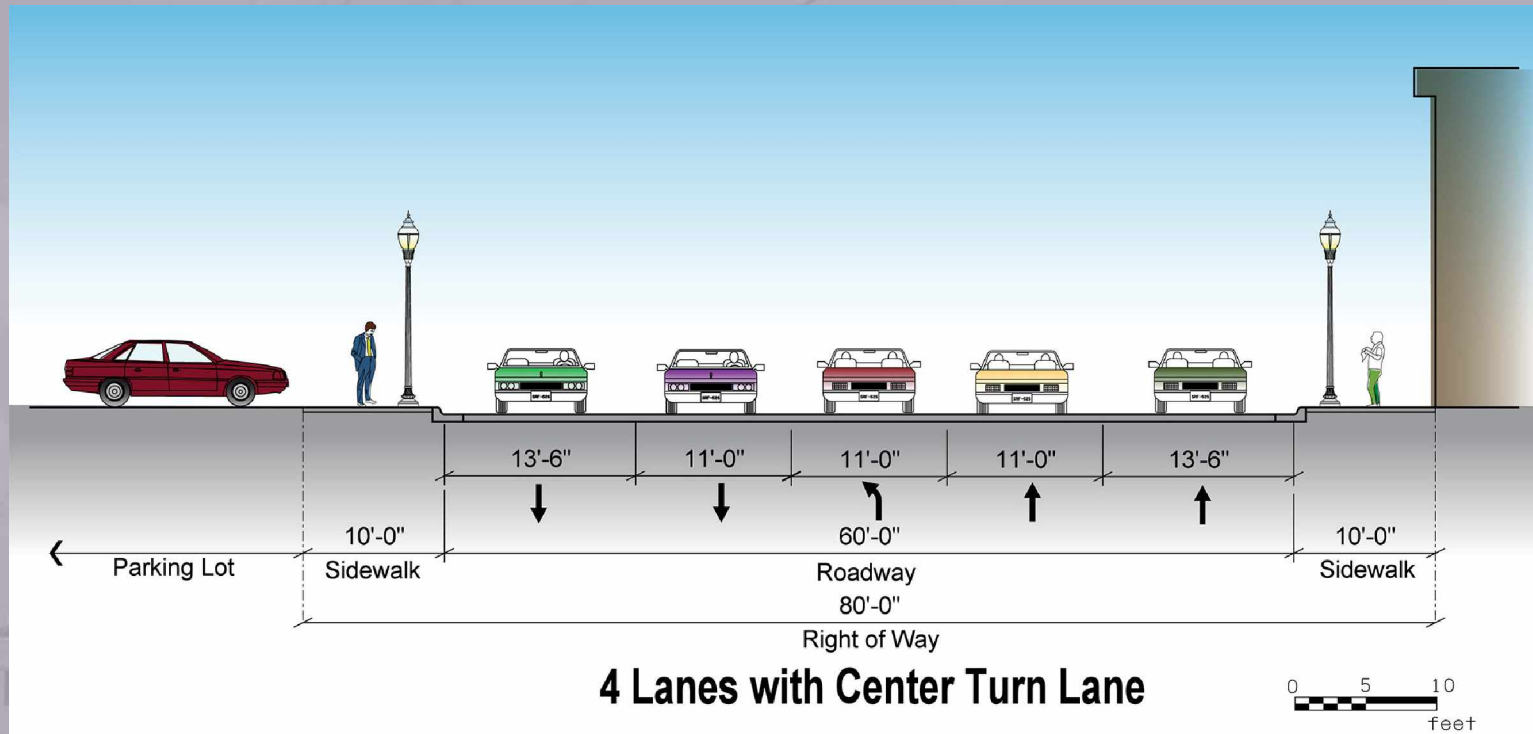
- **Revise street cross section**
- **Modify intersection control at select intersections**
- **Reorganize parcel access**
- **Improve streetscape appearance**
- **Promote redevelopment and building in fill**
- **Organize off-street parking**





Riverfront Drive - *Existing Conditions*

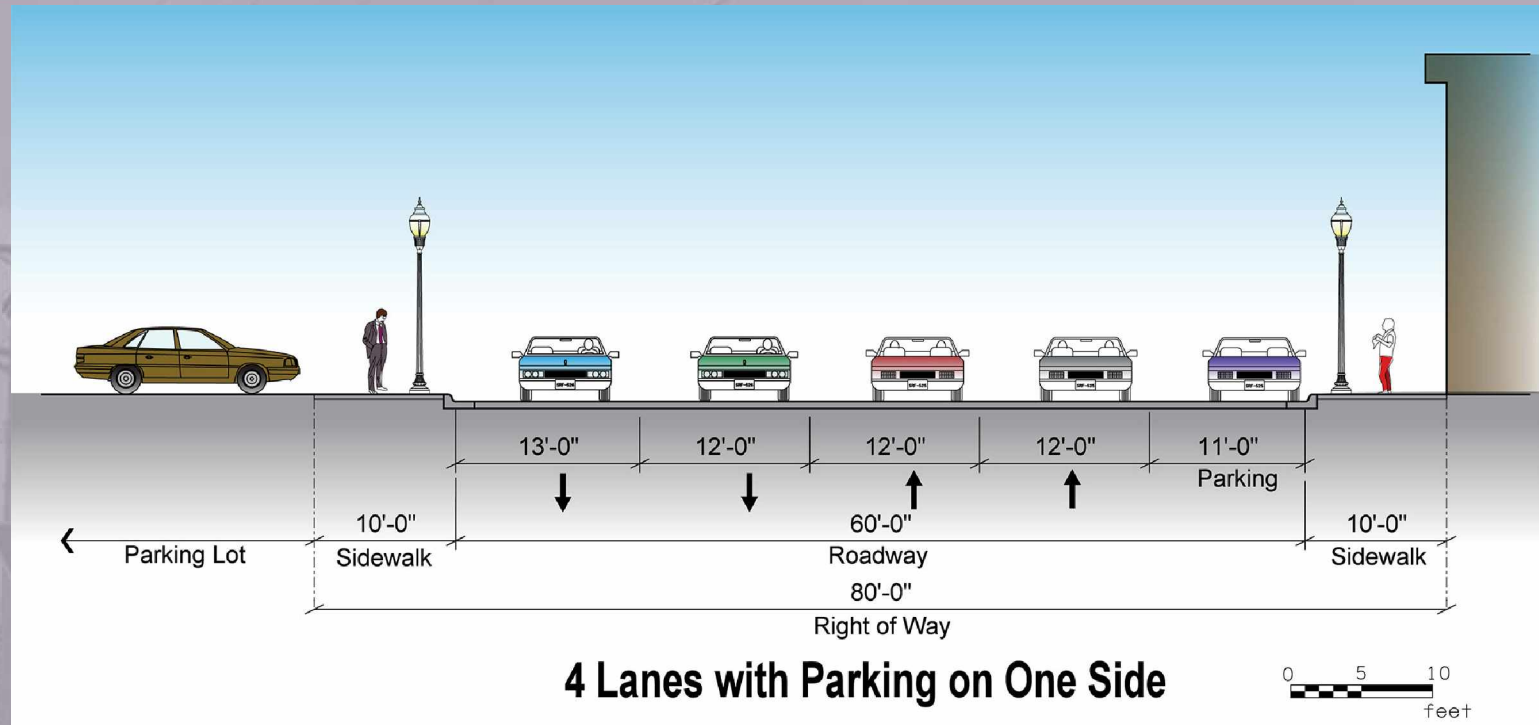
Old Town (Madison Avenue to Plum Street)



- Between Plum Street and Washington Street, and between Rock Street and Madison Avenue
- Principal Arterial

Riverfront Drive - *Existing Conditions*

Old Town (Madison Avenue to Plum Street)

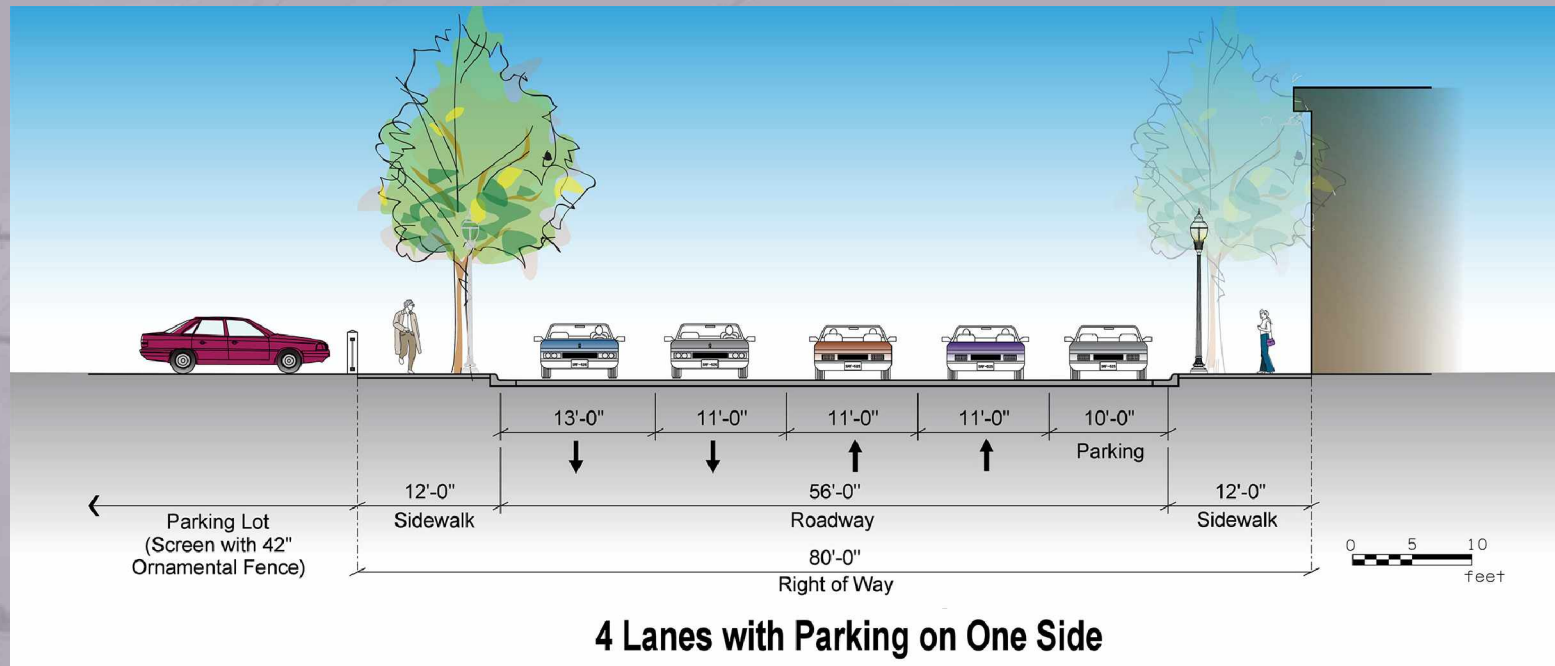


- Between Washington Street and Rock Street
- Principal Arterial



Riverfront Drive

Old Town (Madison Avenue to Plum Street)



Pros:

- On-street parking adjacent to a majority of retail uses
- Bumpouts adjacent to parking increase pedestrian safety
- Increase sidewalk widths

Cons:





- No dedicated left-turn lanes
- Parking and bumpouts restricted to one side of street

Riverfront Drive - Parcel Access Modifications

Old Town (Madison Avenue to Plum Street)



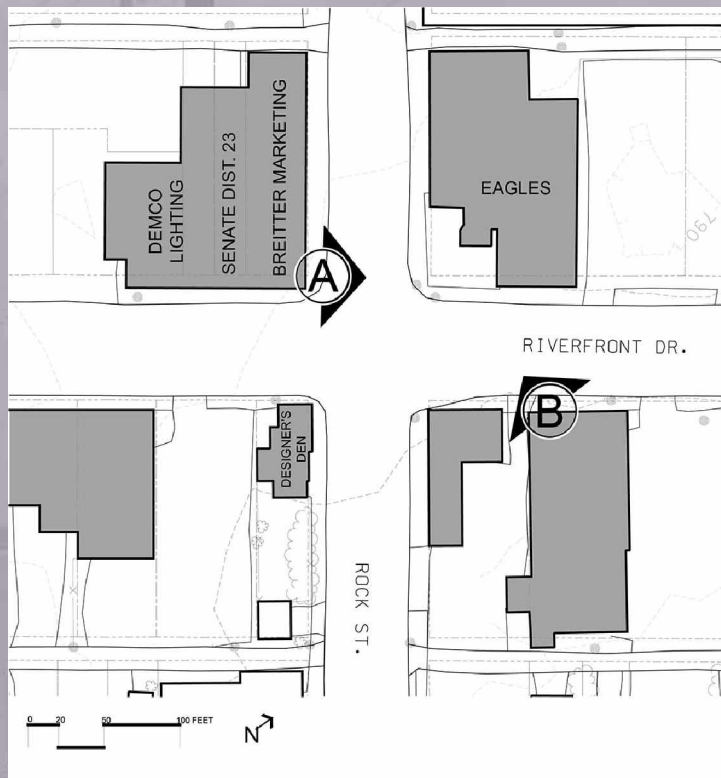
9 Access Drives Proposed for Closure

-  = Existing Access
-  = Access Closure
-  = City Owned Parking Lots & Alleys
-  = Truck Movement

Future Park Gateway

Riverfront Drive at Rock Street

Existing Conditions

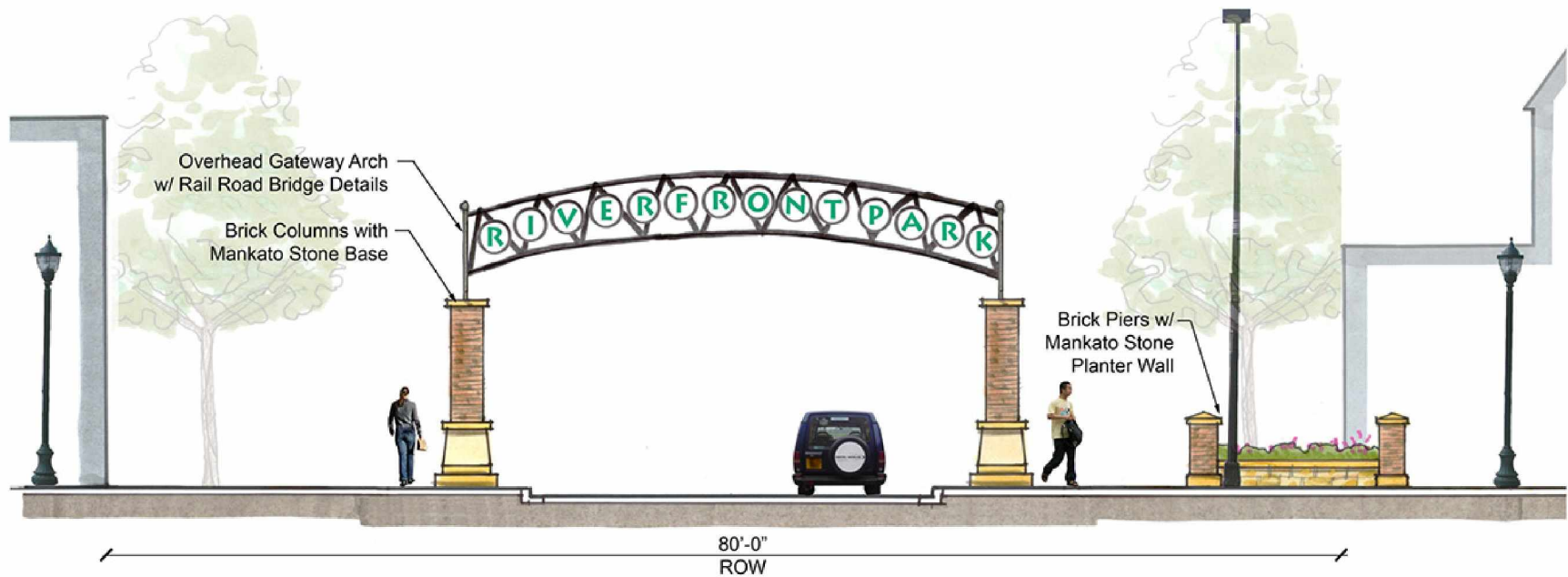


A - View looking northeast

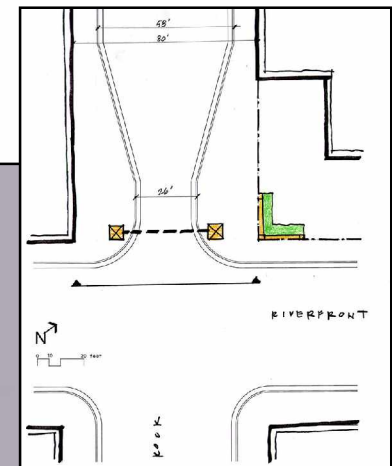


B - View looking west

Future Park Gateway



Concept 1 - Overhead Gateway Arch
(Elevation Looking Towards River)



Riverfront Drive - Objective

(Plum Street to Marshall Street)

- Unified streetscape appearance
- Materials reflect community
- Seasonal colors
- Durability and maintenance



Riverfront Drive - *Existing Conditions*

(Plum Street to Marshall Street)



Wide Medians



Narrow Medians

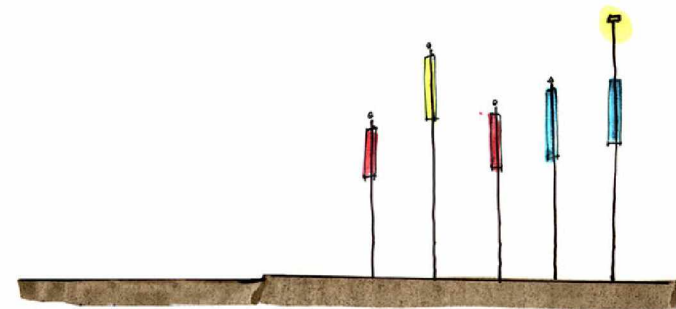
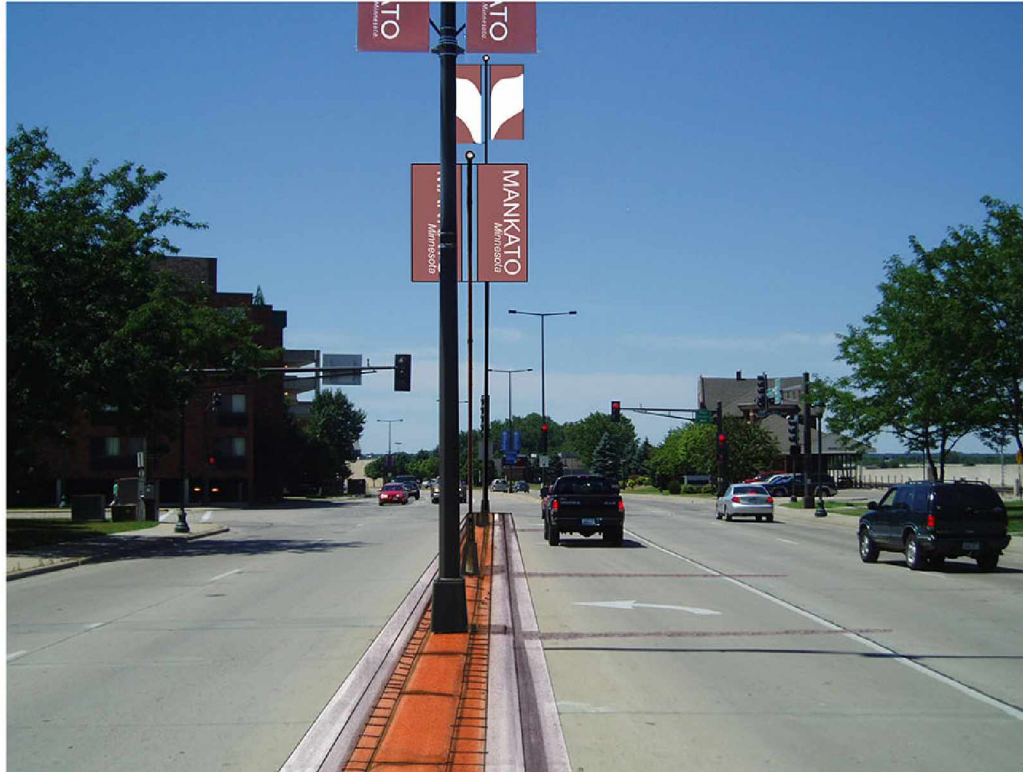
Riverfront Drive - *Wide Median*



ELEVATION - NOT TO SCALE

- New Ulm Quartzite Maintenance Strip Along Edge
- Turf Grass and Trees in Median
- New Ulm Quartzite Raised Planter with Perennial Plantings
- Existing Lights with Colored Banners

Riverfront Drive - *Narrow Median*



ELEVATION - NOT TO SCALE

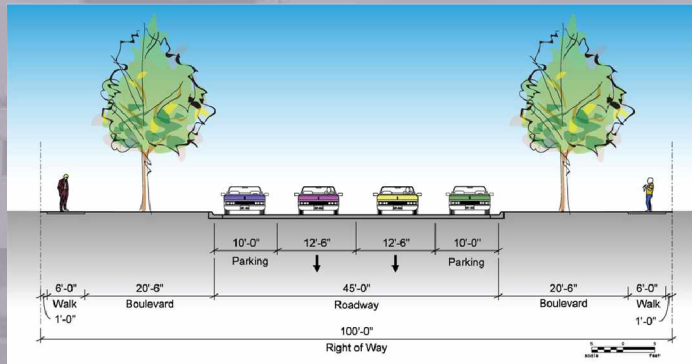
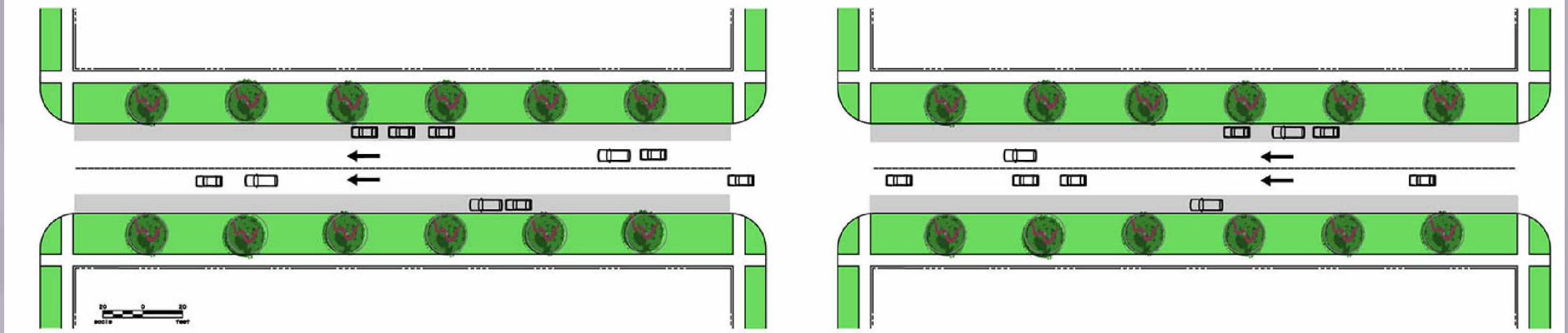
- New Ulm Quartzite Paved Median
- Existing Light Fixtures and Poles with Colored Banners
- Cluster Banner Poles of Various Heights Near End of Median

4th Street & Broad Street - *Existing Conditions*

- One-way pairs
- Residential land use
- City desires to promote reinvestment/rehabilitation
- Heavy traffic volumes and speeds compromise residential livability

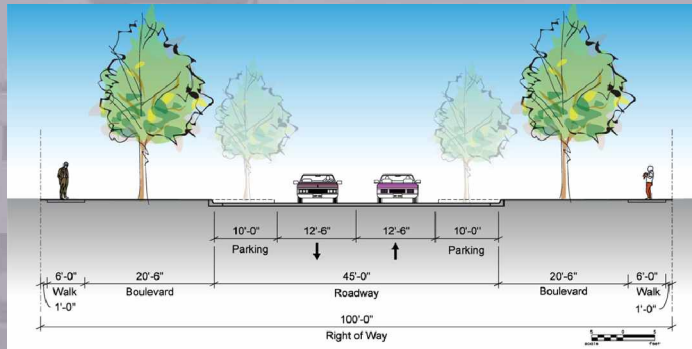
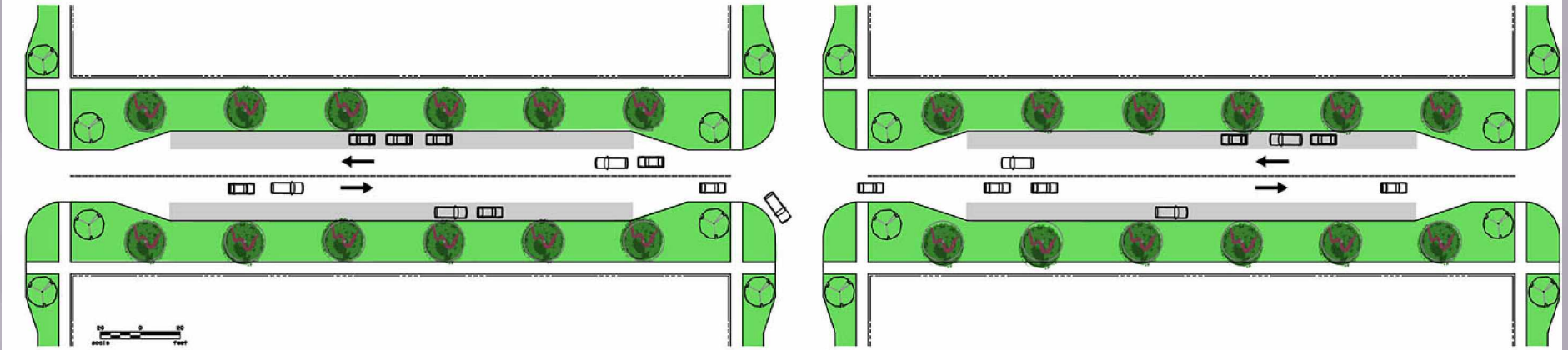


Broad Street - *Existing Conditions*



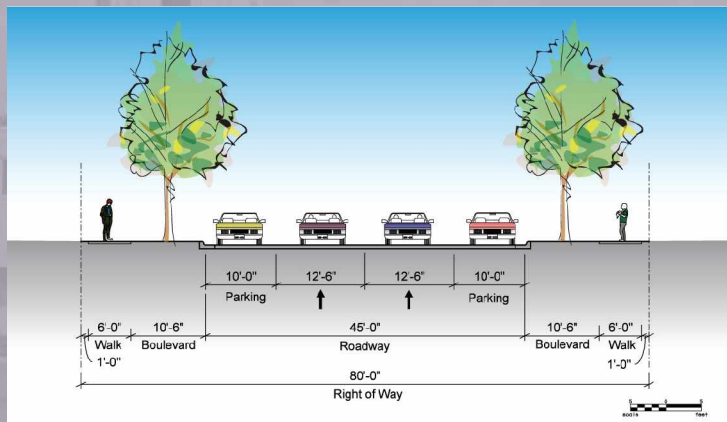
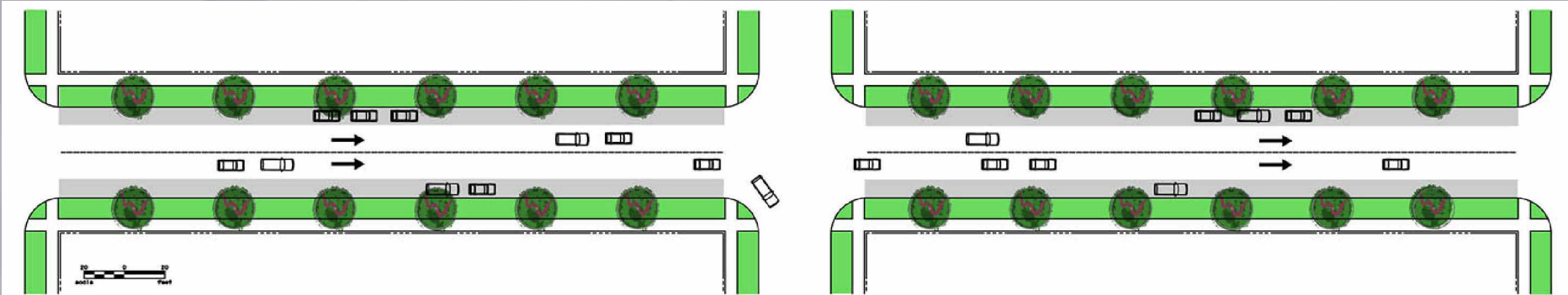
- One-way traffic (Southwest bound)
- Two travel lanes
- Two parking lanes
- Minor Arterial street classification
- 100' ROW, 45' street width

Broad Street - Neckdown



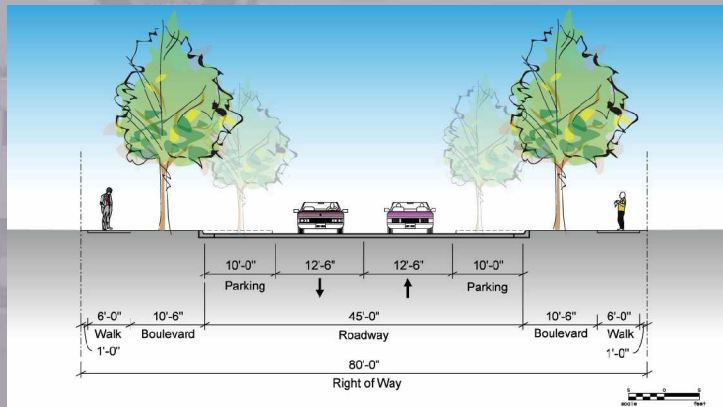
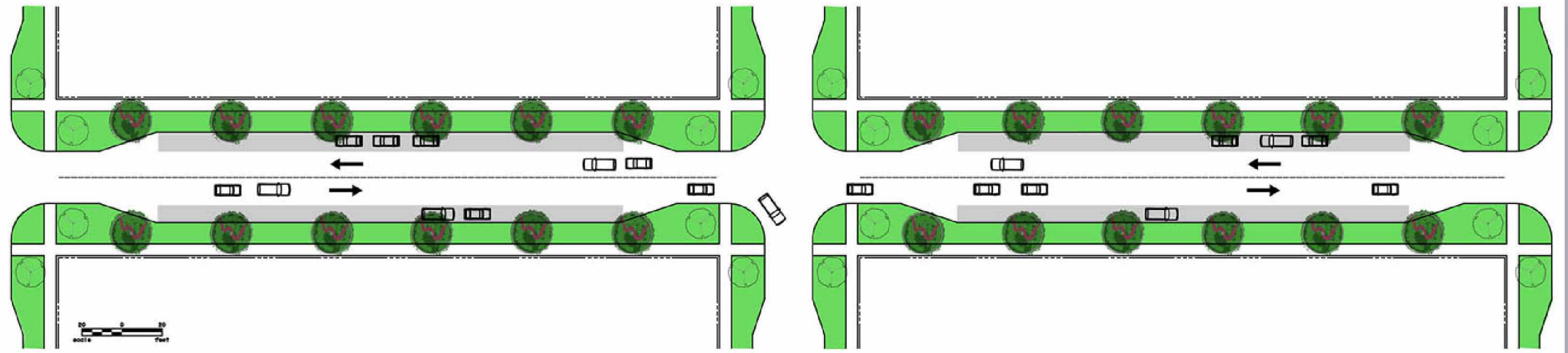
- Two-way traffic
- Protected parking bays
- Reduced pedestrian crossing distance
- Reconstruct key intersections
- At the time of full street reconstruction medians may be considered

Fourth Street - *Existing Conditions*



- One-way traffic (Northeast bound)
- Two travel lanes
- Two parking lanes
- Minor Arterial classification
- 80' ROW

Fourth Street - Neckdown



- Two-way traffic
- Protected parking bays
- Reduced pedestrian crossing distance
- Reconstruct key intersections

Lincoln Park

- Traffic Calming Study is currently in progress for the Lincoln Park area.

